

# Boost Boards Modifications

VBSO / VBIAS

Replace USB Connector

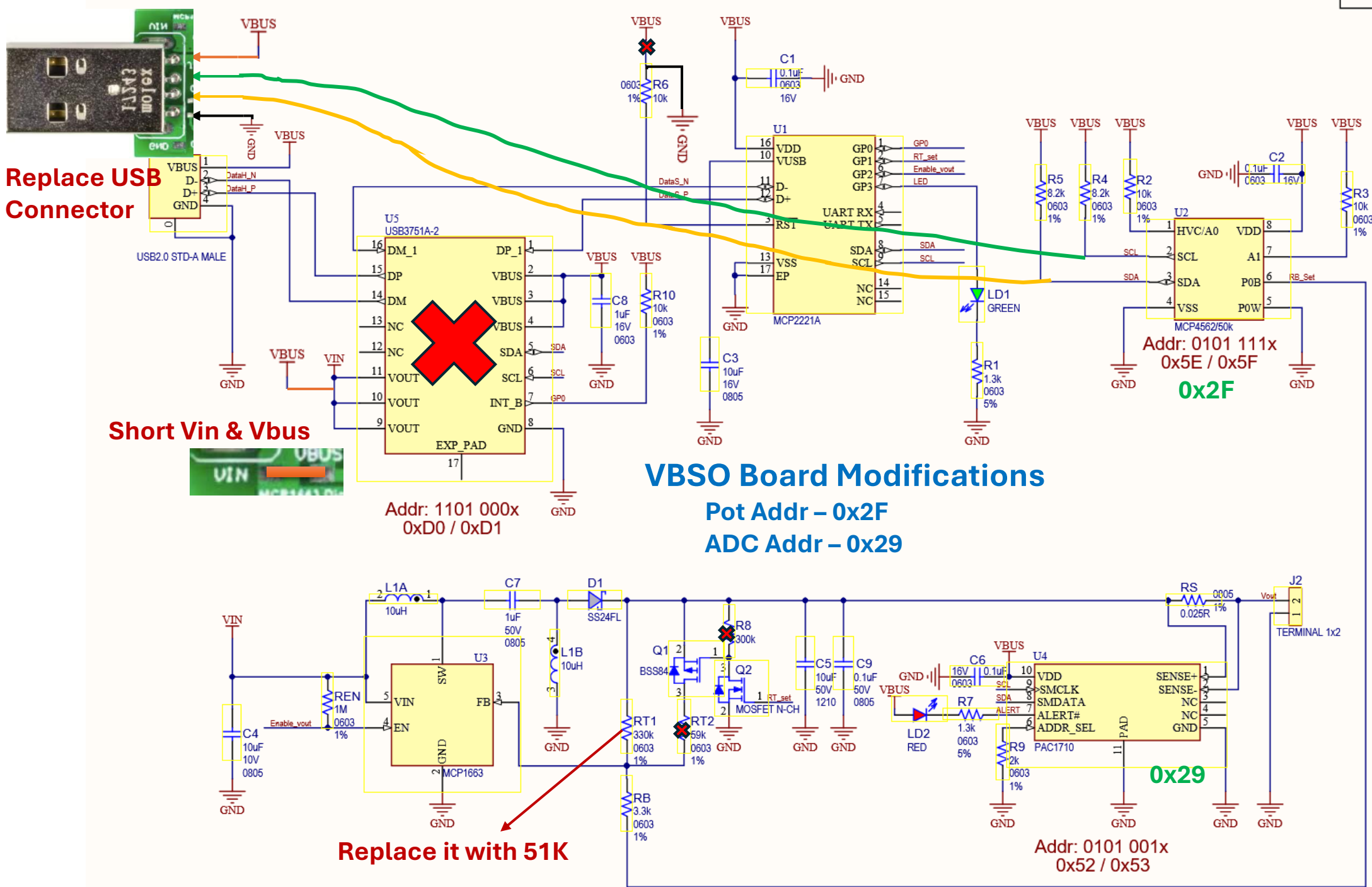
Short Vin & Vbus

## VBSO Board Modifications

Pot Addr – 0x2F

ADC Addr – 0x29

Replace it with 51K



Replace USB Connector

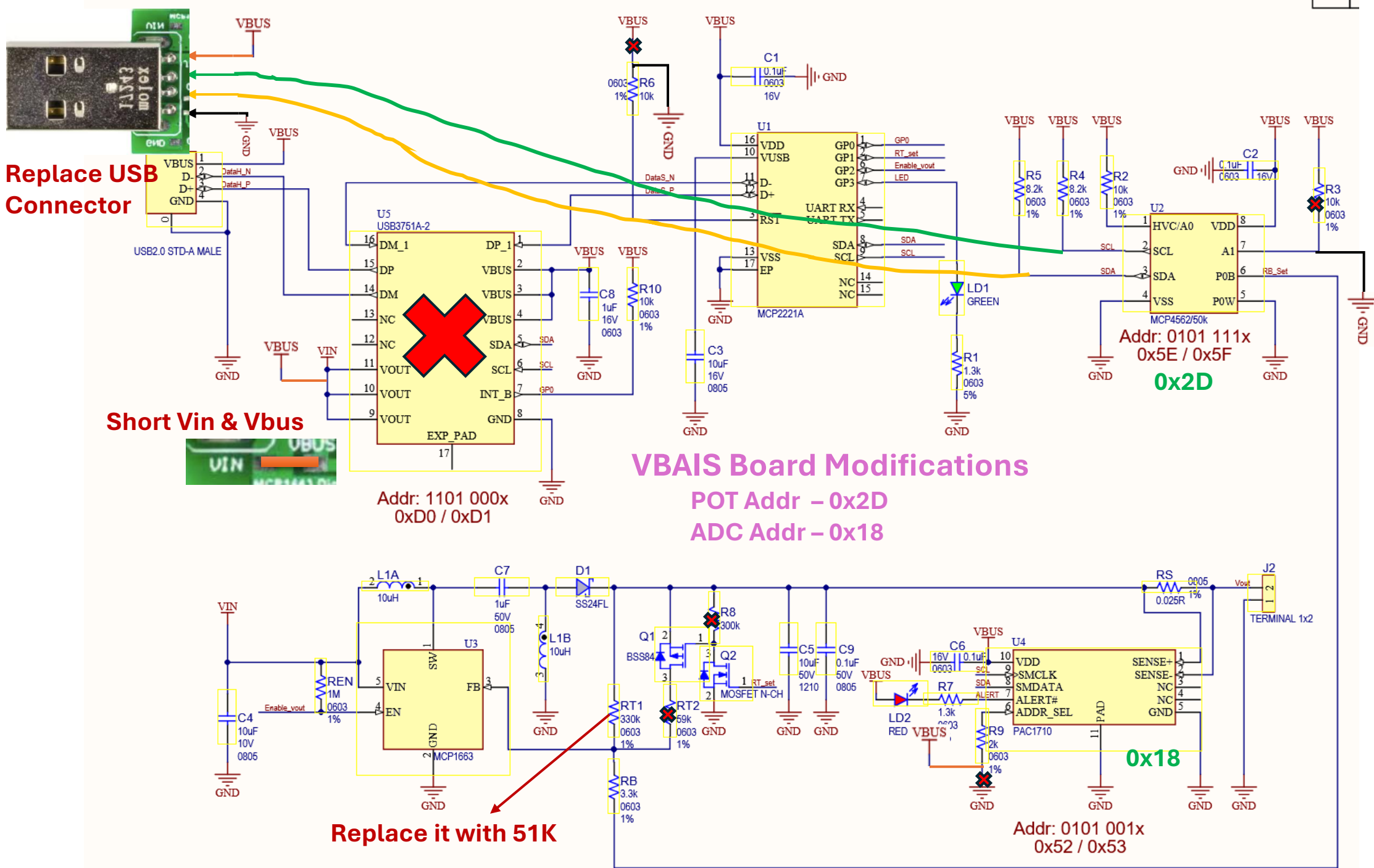
Short Vin & Vbus

## VBAIS Board Modifications

POT Addr – 0x2D

ADC Addr – 0x18

Replace it with 51K



## POT Value Setting for Boost

Sl.No	Salve Address VBSO / VBAIS	Register	Data	Comment
01	0x2F / 2D	0x02	0x46	Default code to set 5V ( do not try to go above 0x50 which will reduce boost voltage less then 5V, decrease value to increase the boost Voltage)
02	0x2F / 2D	0x20	0x46	Burn a default value ( voltage will be set default)

## Read ADC Value

Sl.No	SalveAddress	Register	Data	Comment
01	0x29 / 0x18	0x0B	0x5C	Configure ADC
02	0x29 / 0x18	0x0D	Vsense_LSB	Read lsb data
03	0x29 / 0x18	0x11	Vsense_MSB	Read msb data

## Adc data conversion:

$$\text{Vsense} = ((\text{Vsense\_MSB} \ll 8) \mid \text{Vsense\_LSB}) \gg 5$$
 #ignore Last 5Bits of the LSB data

$$\text{FSV} = (40 - 40/2047)$$

$$\text{Vbus} = \text{FSV} \times \text{Vsense} / 2047$$